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EXAMINER

WONG, LESLIE

ART UNIT	PAPER NUMBER
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2177

DATE MAILED: 08/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/028,934

Applicant(s)

YOUNG ET AL.

Examiner

Leslie Wong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 December 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Preliminary Amendment***

1. Applicants' Preliminary Amendment, filed 20 August 2002, has been received, entered into the record, and considered.
2. The amendment amended claims 1, 17, and 18, and replaces the previously presented paragraph at page 15, ¶42 of the specifications with the amended paragraph and substitute the previous abstract with the amended abstract.

### ***Drawings***

3. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 101***

4. Claims 1-8, 16, 18, and 21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The language of the claim raises a question as to whether the claim is directed merely to an abstract idea that is

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not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C 101.

To expedite a complete examination of the instant application the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four categories of invention.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claim 21 is rejected under 35 U.S.C. 102(e) as being anticipated by **Chu** (U.S. Patent Application 20030065663 A1).

Regarding claim 21, **Chu** teaches a system having a storage device, comprising:

- a). **‘information having segments’** as model repositories contain set of models (§0070).
- b). the storage device having

1). **'a set of templates, each template indicating the content of a corresponding one of said segments, the templates being arranged in an organized first model reflecting relationships among corresponding segments'** as the models stored in the model (i.e., template) repository are organized according to a plurality of logical levels, including a project level, a diagram level, and a model level. The project level may include one or more diagrams, each of which describes a particular set of model specifications (§0066).

2). **'software for reorganizing said templates into a second model and displaying the reorganized templates, the software further enabling a user to access contents of the second model by invoking a corresponding template in the second model'** as the model creator could take an existing model (i.e., template) from one of the project folders, modify the specification in some manner, and then generate a new model. The model creators would then store their own models in their individual project folder (§ 0069).

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1, 3-4, 7-8, 10, 13-14, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kanerva et al.** ("Kanerva") (U.S. Patent 6,507,858 B1) in view of **Reed et al.** ("Reed") (Computational Simulation of Gas Turbines).

Regarding claim 1, **Kanerva** teaches a database having a plurality of sections, each section storing one or more templates as a compound document (i.e., database) having ordered sections of different file formats (i.e., template) (col. 3, lines 38-40), a method of reorganizing a select template from one section to a different section within said plurality of sections as the order between the first and second section is updated within the index structure in response to storing the first and second sections in the binder file (col. 3, lines 48-51), the method comprising the steps of:

a). **'reviewing an index file corresponding to the select template to identify a section among said plurality of sections where the select template is**

**organized'** as the header is maintained within the binder file (i.e., index file) and within the header, the index structure follows the binder property stream. The index structure is a stream that maintains the order of binder document section. Corresponding to each order, a section pointer gives the memory location of the section for the corresponding order index (col. 20, lines 21-25, col. 20, line 65 – col. 21, line 1-11); and

b). **'editing a storage location of the index file to identify a different section among said plurality of sections to reorganize the select template to the different section without moving underlying files of the select template between the plurality of sections'** as an index structure may be altered so as to change the order of binder document sections (i.e., template location) in the binder document, without altering the memory locations in which the binder document sections are stored (col. 3, lines 58-60 and abstract lines 8-11).

**Kanerva** does not explicitly teach **'design the turbine engine'**.

**Reed**, however, teaches **'design the turbine engine'** as common engineering model approach is demonstrated by developing gas turbine component models which will be used to compose a gas turbine engine model (page 1, Abstract, last 3 lines).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Reed's** teaching would have allowed **Kanerva** to allow flexible component-based representation for gas turbine systems, subsystems and components and allows new

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models to be composed programmatically or visually to form more complex models as suggested by **Reed** at page 1, Abstract lines 13-15.

Regarding claim 3, **Kanerva** further teaches '**including a storage location of the select template in a header portion of a corresponding index file**' as the binder file (i.e., index file) includes a header for storing information about the binder document (i.e., database). An index structure which includes an order index and a section index, is created within the header. The index structure is updated with an order index and a memory location as a section pointer between sections of the binder document is maintained in the binder file by updating the index structure in this manner (col. 22, lines 26-30; col. 22, lines 60-65).

Regarding claim 4, **Kanerva** further teaches '**populating each index file with corresponding template details**' as the binder property stream used by the binder program module to store information on properties related to all sections (i.e., template) of the binder document (i.e., database) (col. 20, lines 21-64).

Regarding claim 7, **Kanerva** further teaches '**providing in each index file one or more of (i) fields identified within a template, (ii) storage locations of components described by a template, (iii) revision and update information of a template**' as the index structure includes an order index and a section pointer. The



order index maintains the user-definable order of binder document sections (i.e., storage location) (col. 20, line 65 - col. 21, line 11).

Regarding claim 8, **Kanerva** further teaches **'including in the revision information at least one of a revision number, revision date, or description of revisions performed'** as the binder property stream in the header stores information on properties related to all sections of the binder documents. For example, Table 2 provides a list of the key properties Revision Number, Last saved By, and Comments etc... (col. 20, lines 21-64).

Regarding claim 10, **Kanerva** teaches a computer program product having a computer useable medium having computer program logic stored thereon for enabling a processor in a computer system to process data, said computer program product comprising:

b). **'means for checking an index file corresponding to a select template to identify a section among a plurality of sections where the select template is organized'** as the index structure within the header of the binder file. The index structure is a stream that maintains the order of binder document section. Corresponding to each order, a section pointer gives the memory location of the section for the corresponding order index (col. 20, lines 21-25, col. 20, line 65 – col. 21, line 11);

c). **'means for editing a storage location of the index file to reorganize the select template to a different section among said plurality of sections without moving underlying files of the select template between the plurality of sections'** as the order of sections can be changed by altering the order stored in the index structure without altering the location where the first and second section are stored in memory (col. 3, lines 58-60 and abstract lines 8-11).

a). **Kanerva** does not explicitly teach a database having a plurality of templates stored therein for use in turbine design.

**Reed**, however, teaches **'a database having a plurality of templates stored therein for use in turbine design'** as common engineering model approach is demonstrated by developing gas turbine component models which will be used to compose a gas turbine engine model. The component model utilizes Object-oriented technology to setup a framework for the representation of engine components, subcomponents and subassemblies (page 1, Abstract, last 3 lines; page 11, Conclusion, lines 10-14).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Reed's** teaching would have allowed **Kanerva** to allow flexible component-based representation for gas turbine systems, subsystems and components and allows new models to be composed programmatically or visually to form more complex models. Further, the technology improves design and development of aerospace simulation

systems by leveraging proven software design to produce a reusable component-based architecture which can be extended and customized to meet future application requirements as suggested by **Reed** at page 1, Abstract lines 13-15 and page 11, Conclusion lines 15-18.

Regarding claim 13, **Kanerva** further teaches wherein **'location of the select template is organized in a header portion of a corresponding index file'** as the binder file (i.e., index file) includes a header for storing information about the binder document (i.e., database). An index structure which includes an order index and a section index, is created within the header. The index structure is updated with an order index and a memory location as a section pointer between sections of the binder document is maintained in the binder file by updating the index structure in this manner (col. 22, lines 26-30; col. 22, lines 60-65).

Regarding claim 14, further teaches wherein **'each index file includes information of a corresponding template'** as the index structure is a stream that maintains the order of binder document sections (i.e., templates) (i.e., database) (col. 20, lines 21-67).

Regarding claim 19, **Kanerva** teaches a method for reorganizing one or more templates arranged in a plurality of sections in a database of a remote server, the server using a software application, the method comprising:

a). **'communicatively coupling the server to a plurality of remote client computers'** as the personal computer operates in a networked environment with logical connections to a remote computer (col. 8, lines 14-24; Fig. 1, element 14);

b). **'accessing the server from one or more said client computers'** as when the user wants to load a program module such as the binder program module, the operating system interprets the instruction and causes the processing unit (PU) of the remote memory storage device to load the program code (col. 9, lines 9-22; col. 9, line 58 – col. 10, line 1);

c). **'analyzing the software application to identify one or more of functions, processes, procedures, and steps for reorganizing said one or more templates'** as the binder program module is implemented as an executable program module that organizes the sections as a single binder document (col. 17, lines 33-37);

d). **'identifying an index file corresponding to respective said one or more templates'** as the index structure is a stream that maintains the order of binder document section. Corresponding to each order, a section pointer gives the memory location of the section for the corresponding order index (col. 20, lines 21-25, col. 20, line 65 – col. 21, line 1-11);

e). **'editing a select index file to reorganize a template corresponding to the select index file'** as an index structure may be altered so as to change the order of binder document sections (i.e., template location) in the binder document, without altering the memory locations in which the binder document sections are stored (col. 3, lines 58-60 and abstract lines 8-11); and

f). **'displaying reorganized templates to a user'** as a selection area for displaying graphic images representing the sections of the binder document (col. 15, lines 41-45).

**Kanerva** does not explicitly teach enabling a user to design a turbine.

**Reed**, however, teaches **'design the turbine engine'** as common engineering model approach is demonstrated by developing gas turbine component models which will be used to compose a gas turbine engine model (page 1, Abstract, last 3 lines).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Reed's** teaching would have allowed **Kanerva** to allow flexible component-based representation for gas turbine systems, subsystems and components and allows new models to be composed programmatically or visually to form more complex models as suggested by **Reed** at page 1, Abstract lines 13-15.

9. Claims 2 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kanerva et al.** ("Kanerva") (U.S. Patent 6,507,858 B1) in view of **Reed et al.** ("Reed") (Computational simulation of gas Turbines) as applied to claims 1, 3-4, 7-8, 10, 13-14, and 19 above and further in view of **Harrison et al.** ("**Harrison**") (U.S. Patent 6,611,725 B1).

Regarding claim 2, **Kanerva** and **Reed** do not explicitly teach wherein said templates are in PDF format.

**Harrison**, however, teaches wherein said **'templates are in PDF format'** as a design model generated by that computer aided design system creates a drawing of an object by utilizing the CAD software to construct the model of the object from the various component documents referenced by the model's document. A 2D projected view can be stored in the drawing document using a vector graphic format. Example vector graphic formats include the scalable vector graphic (SVG) file format, the Adobe Illustrator (AI) file format, the Adobe Portable Document Format (PDF), and others (col. 2, lines 1-3 and 16-27).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Harrison's** teaching would have allowed **Kanerva- Reed's** to improve annotation, editing, addition of supplementary data, and other manipulations of 2-D drawings created by a CAD system by using a drawing document format that includes image elements (e.g., vector drawing data) such as the Adobe Portable Document Format (PDF) as suggested by **Harrison** at col. 4, lines 62-66 and col. 2, lines 16-27.

Regarding claim 12, **Kanerva** and **Reed** do not explicitly teach wherein said templates are in PDF format.

**Harrison**, however, teaches wherein said **'templates are in PDF format'** as a design model generated by that computer aided design system creates a drawing of an object by utilizing the CAD software to construct the model of the object from the various component documents referenced by the model's document. A 2D projected

view can be stored in the drawing document using a vector graphic format. Example vector graphic formats include the scalable vector graphic (SVG) file format, the Adobe Illustrator (AI) file format, the Adobe Portable Document Format (PDF), and others (col. 2, lines 1-3 and 16-27).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Harrison's** teaching would have allowed **Kanerva- Reed's** to improve annotation, editing, addition of supplementary data, and other manipulations of 2-D drawings created by a CAD system by using a drawing document format that includes image elements (e.g., vector drawing data) such as the Adobe Portable Document Format (PDF) as suggested by **Harrison** at col. 4, lines 62-66 and col. 2, lines 16-27.

10. Claims 5, 9, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kanerva et al.** ("Kanerva") (U.S. Patent 6,507,858 B1) in view of **Reed et al.** ("Reed") (Computational simulation of gas Turbines) as applied to claims 1, 3-4, 7-8, 10, 13-14, and 19 above and further in view of **Chu** (U.S. Patent Application 20030065663 A1).

Regarding claim 5, **Kanerva** and **Reed** do not explicitly teach enabling a user to search contents of said one or more templates.

**Chu**, however, teaches 'enabling a user to search contents of said one or more templates' as the end user accesses the model repository and supply search parameters to search for appropriate model (§ 0071).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Chu's** teaching would have allowed **Kanerva- Reed's** to find one or more useful models in order to obtain a copy of the information contained in the model to determine which model is most suitable for the particular task as suggested by **Chu** lines (¶ 0071 and ¶ 0072, lines 15-19).

Regarding claim 9, **Kanerva** further teaches '**storing user profiles as text files in a server**' as author's name who last saved the document (col. 20, lines 30-64, table 2).

Regarding claim 15, **Kanerva** and **Reed** do not explicitly teach enabling a user to search contents of said one or more templates.

**Chu**, however, teaches '**means for enabling a user to search contents of each of the plurality of templates**' as the end user accesses the model repository and supply search parameters to search for appropriate model (¶ 0071).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Chu's** teaching would have allowed **Kanerva- Reed's** to find one or more useful models in order to obtain a copy of the information contained in the model to determine which model is most suitable for the particular task as suggested by **Chu** lines (¶ 0071 and ¶ 0072, lines 15-19).



11. Claims 6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kanerva et al.** ("Kanerva") (U.S. Patent 6,507,858 B1) in view of **Reed et al.** ("Reed") (Computational simulation of gas Turbines) as applied to claims 1, 3-4, 7-8, 10, 13-14, and 19 above and further in view of **Kubica et al.** ("**Kubica**") (U.S. Patent Application 2002/0035432).

Regarding claim 6, **Kanerva** and **Reed** do not explicitly teach the steps of:

- a). tracking templates having altered index files; and
- b). notifying users of template reorganization.

**Kubica**, however, teaches the steps:

- a). '**tracking templates having altered index files**' as when user updates data in the OX Spatial Index, the quality indicia or metadata is recorded (§ 32); and
- b). '**notifying users of template reorganization**' as when an update occurs which meets the criteria set by a user, the user is sent a notification of the update (§ 33).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Kubica's** teaching would have allowed **Kanerva- Reed's** to ensure accuracy of the index and certify the quality of the data to help determine whether the data can be relied upon as suggested by **Kubica** lines (§ 32, lines 4-13).

Regarding claim 11, **Kanerva** and **Reed** do not teach the steps of:

- a). means for tracking templates having altered index files; and
- b). means for notifying users of template reorganization.

**Kubica**, however, teaches the steps:

- a). **'tracking templates having altered index files'** as when user updates data in the OX Spatial Index, the quality indicia or metadata is recorded (§ 32); and
- b). **'notifying users of template reorganization'** as when an update occurs which meets the criteria set by a user, the user is sent a notification of the update (§ 33).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Kubica's** teaching would have allowed **Kanerva- Reed's** to ensure accuracy of the index and certify the quality of the data to help determine whether the data can be relied upon as suggested by **Kubica** lines (§ 32, lines 4-13).

12. Claims 16, 17, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable **Chu** (U.S. Patent Application 20030065663 A1) in view of **Kanerva et al.** ("**Kanerva**") (U.S. Patent 6,507,858 B1).

Regarding claim 16, **Chu** teaches a computer-based method for reorganizing a template among a plurality of templates stored in a plurality of sections within a database for use in model design, the method comprising:

a). **'storing the plurality of templates in a first organized model in said database, each template having an associated index file'** as the end user searches for an appropriate model (i.e., template) by possibly examining the one or more index structures (§ 0071).

b). **'displaying said plurality of templates and an index file corresponding to a selected template by user action'** as user search the repositories models by examining one or more index structures and obtain a useful model (§s 0071, 0072, and § 0073) and

c). **Chu** teaches modify the indexes to improve the performance (§ 0072).

**Chu** does not explicitly teach editing the index file to *reorganize* the selected template from the first organized model to a second organized model.

**Kanerva**, however, teaches **'editing the index file to reorganize the selected template from the first organized model to a second organized model'** as an index structure may be altered so as to change the order of binder document sections (i.e., template location) in the binder document, without altering the memory locations in which the binder document sections are stored (col. 3, lines 58-60 and abstract lines 8-11).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Kanerva's** teaching would have allowed **Chu's** to maintain and update the sections (i.e., templates) without inefficient and time-consuming changes of the memory

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locations for these sections by enabling altering the order stored in the index structure as suggested by **Kanerva** at col. 3, lines 61-64.

Regarding claim 17, **Chu** teaches in a electronic communication network having a client computer system communicatively coupled to a server computer for accessing information stored therein for use in designing a model, the server computer comprising:

a). **'a memory for storing a plurality of templates in a first organized model in said memory, each template having an associated index file'** as the end user searches for an appropriate model (i.e., template) by possibly examining the one or more index structures (§ 0071).

b). **'a software application stored in said memory for retrieving and displaying template information on a display device of said client computer system in response to user action'** as user search the repositories models by examining one or more index structures and obtain a useful model (§s 0071, 0072, and 0073) .

c). **Chu** teaches modify the indexes to improve the performance (§ 0072).

**Chu** does not explicitly teach said software application enabling a user to edit an index file corresponding to a displayed template to reorganize the displayed template from the first organized model to a second organized model.

**Kanerva**, however, teaches **'editing the index file to reorganize the selected template from the first organized model to a second organized model'** as an index structure may be altered so as to change the order of binder document sections (i.e., template location) in the binder document, without altering the memory locations in which the binder document sections are stored (abstract lines 8-11).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Kanerva's** teaching would have allowed **Chu's** to maintain and update the sections (i.e., templates) without inefficient and time-consuming changes of the memory locations for these sections by enabling altering the order stored in the index structure as suggested by **Kanerva** at col. 3, lines 61-64.

Regarding claim 18, **Chu** teaches a method of reorganizing a plurality of templates for designing a model, the templates being organized in a plurality of sections within a database, the method comprising:

a). **'displaying the plurality of templates, each template having an associated index file indicating a section where a respective template is stored'** as the end user searches for an appropriate model (i.e., template) by possibly examining the one or more index structures (§ 0071).

b). **'enabling a user to select a template from the plurality of templates; displaying contents of the select template to the user'** as user search the

repositories models by examining one or more index structures and *obtain* a useful model (§s 0071, 0072, and 0073) .

**Chu** teaches modify the indexes to improve the performance (§ 0072).

**Chu** does not explicitly teach the steps of:

- c). enabling the user to modify the index file associated with the select template for reorganizing the select template to a different section among said plurality of sections; and
- d). the reorganization step being executed without moving files making up the select template.

c). **Kanerva**, however, teaches ‘enabling the user to modify the index file associated with the select template for reorganizing the select template to a different section among said plurality of sections’ as the order of sections can be changed by altering the order stored in the index structure (col. 3, lines 58-60 and abstract lines 8-11);

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Kanerva’s** teaching would have allowed **Chu’s** to maintain and update the sections (i.e., templates) without inefficient and time-consuming changes of the memory locations for these sections by enabling altering the order stored in the index structure as suggested by **Kanerva** at col. 3, lines 61-64.

d). **Kanerva**, however, further teaches **'the reorganization step being executed without moving files making up the select template'** as the order of sections can be changed by altering the order stored in the index structure without altering the location where the first and second section are stored in memory (col. 3, lines 58-60 and abstract lines 8-11).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Kanerva's** teaching would have allowed **Chu's** to maintain and update the sections (i.e., templates) without inefficient and time-consuming changes of the memory locations for these sections by enabling altering the order stored in the index structure as suggested by **Kanerva** at col. 3, lines 61-64.

Regarding claim 20, **Chu** teaches a method for reorganizing files stored in a file management system, the files arranged in a plurality of sections within the file management system, the method comprising:

a). **'accessing a server from one or more remote client computers, the server storing the file management system'** as the model creator (i.e., client) constructs models and store them in the knowledge repositories 108 (i.e., server). The model creator searches repository models by examining one or more index structures and to obtain a useful model (§s 0091; 0071, 0072, and ¶ 0073; Fig. 21, elements 38, 52, and 108);

b). **'retrieving and displaying the plurality of sections on a remote client computer'** as the user accesses the model repository and searches for an appropriate model. Having found a useful model, the end user may then obtain a copy of the information contained in the model (§0071);

c). **'selecting a section from the plurality of sections'** as the model creator select an existing model from one of project folders (§0069);

d). **'displaying templates included in the selected section; selecting a template from the displayed templates'** as choose a model from many similar ones (§0072);

e). **'displaying an image corresponding to the selected template'** as the project level may include one or more diagrams (§0066);

f). **Chu** does not explicitly teach editing an index file corresponding to the selected template for reorganizing the selected template into another section among the plurality of sections without moving underlying template files between the plurality of sections.

**Kanerva**, however, teaches **'editing the index file to reorganize the selected template from the first organized model to a second organized model'** as an index structure may be altered so as to change the order of binder document sections (i.e., template location) in the binder document, without altering the memory locations in which the binder document sections are stored (col. 3, lines 58-60 and abstract lines 8-11).



It would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine the teachings of the cited references because **Kanerva's** teaching would have allowed **Chu** to maintain and update the sections (i.e., templates) without inefficient and time-consuming changes of the memory locations for these sections by enabling altering the order stored in the index structure as suggested by **Kanerva** at col. 3, lines 61-64.

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 5,822,206 A issued to Sebastian et al. on 13 October 1998. The subject matter disclosed therein is pertinent to that of claims 1, 10, 16-21 (e.g., product model for design machine parts).

U.S. Patent 5,768,149 A issued to Umney et al. on 16 June 1998. The subject matter disclosed therein is pertinent to that of claims 1, 10, 16-18, and 20 (e.g., designing a tube for a gas turbine engine).

U.S. Patent 6,078,928 A issued to Schnase et al. on 20 June 2000. The subject matter disclosed therein is pertinent to that of claim 9 (e.g., profiling an individual's interests in various sites).

U.S. Patent 6,161,139 A issued to Win et al. on 12 December 2000. The subject matter disclosed therein is pertinent to that of claim 9 (e.g., role-based access).

U.S. Patent 6,182,279 B1 issued to Buxton on 30 January 2001. The subject matter disclosed therein is pertinent to that of claims 1, 10, 16-18, and 20 (e.g., indexed templates builder utility).

U.S. Patent 6,377,956 B1 issued to Hsu et al. on 23 April 2002. The subject matter disclosed therein is pertinent to that of claims 1, 10, 16-18, and 20 (e.g., assemble product manuals based on a product model).

U.S. Patent Application 2002/0029138 A1 published on 07 March 2002. The subject matter disclosed therein is pertinent to that of claims 1, 10, 16-18, and 20 (e.g., analyzing turbine engine disks).

Reed et al., - Computational Simulation of Gas Turbines: Part II – Extensible Domain Framework. The subject matter disclosed therein is pertinent to that of claims 1, 10, 16-18, and 20 (gas turbine engine simulation).

Needham et al. - Concurrency in Object-Oriented Propagation Modeling Using Ada95. The subject matter disclosed therein is pertinent to that of claims 1, 10, 16-18, and 20 (e.g., gas turbine engine blade design).

Forsyth et al. – Concept Demonstration of the Use of Interactive Fault Diagnosis and Isolation for TF30 Engines. The subject matter disclosed therein is pertinent to that of claims 1, 10, 16-18, and 20 (e.g., aircraft gas turbine engine).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leslie Wong whose telephone number is (703) 305-3018. The examiner can normally be reached on Monday to Friday 9:30am - 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (703) 305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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